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## China - Peoples Republic of

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## Technical Regulations for Cotton Processing

### Report Categories:

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### Approved By:

William Westman

### Prepared By:

Chanda Beckman and Wu Xinpeng

### Report Highlights:

On December 31, 2008, China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and China's National Standardization Commission published National Standard GB/T 22335-2008 on Technical Regulations for Cotton Processing. The standard, effective May 1, 2009, has not yet been notified to the World Trade Organization (WTO). The standard applies to domestic cotton purchases and processing and is unlikely to impact international cotton trade. This report contains an UNOFFICIAL translation of GB/T 22335-2008.

### Executive Summary:

On December 31, 2008, China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and China's National Standardization Commission published National Standard GB/T 22335-2008 on Technical Regulations for Cotton Processing. The standard, effective May 1, 2009, has not yet been notified to the World Trade Organization (WTO). The standard applies to domestic cotton purchases and processing and stipulates the technical regulations for cotton processing. It is unlikely to impact international cotton trade. This report contains an UNOFFICIAL translation of GB/T 22335-2008.

### General Information:

## **Government Certificate Legal Entry Requirements:**

### **Author Defined:**

### **BEGIN TRANSLATION:**

National Standard of the People's Republic of China

Technical Regulations for Cotton Processing

Published on December 31, 2008

Implemented on May 1, 2009

Published by China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and China's National Standardization Commission

GB/T 22335—2008

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### **Preface**

This standard is proposed by the All-China Federation of Supply and Marketing Cooperatives.

This standard falls under the jurisdiction of the National Technical Committee on Cotton Processing of China's National Standardization Commission.

This standard is drafted by: Handan Jinshi Cotton Machinery Co., Ltd., Cotton Processing Committee of China Cotton Association, Zhengzhou Cotton and Jute Engineering and Technology Design Institute under the All-China Federation of Supply and Marketing Cooperatives; China Cotton Machinery & Equipment Co., Ltd.; Nantong Cotton Machinery Co., Ltd.; and Cotton and Jute Company of No. 7 Farm Branch of Xinjiang Production and Construction Corps.

Principal drafters of this standard: Su Yingjie, Hu Chunlei, Guan Jipei, Li Jiuxi, Wang Ruixia, Zhao Mingshan, Qian

Peng, Li Futang, Dong Chunqiang, and Qin Yubin.

## **1. Scope**

This standard specifies the technical requirements for cotton during its purchase and entire processing process.

This standard applies to the purchase and processing of seed cotton.

## **2. Normative References**

The clauses contained in the following standards are incorporated as clauses of this present standard by reference. For dated references, subsequent amendments (other than corrigenda) or revisions are not applicable to this present standard; however, the parties to an agreement made on the basis of this standard are encouraged to review the possibility of using the latest edition of referenced documents. For undated references, the latest edition of the publication referred to applies.

GB 1103---Cotton—Upland Cotton

GB 6975---Cotton Baling

GB/T 13786-1992---Artificial Day-lighting Illumination for Cotton Classing Rooms

GB/T 18353---Basic Technical Condition of Cotton Processing Enterprise

GB 19635—2005---Cotton—Long Staple Cotton

GB/T 20223---Cotton—Linters

GB 50016---Code of Design on Building Fire Protection and Prevention

GH/T 1043—2007---General Technical Specification for Installation and Manufacturing of Cotton Processing System

## **3. General Requirements**

### **3.1 Establishment of cotton processing enterprises**

3.1.1 Qualification certificates shall be acquired in accordance with relevant requirements of the state, including reasonable layout and plan, processing qualification license, quality assurance capability validation, and fire prevention conditions compliance certificate, etc.

3.1.2 Architectural design and general layout shall agree with the stipulations contained in GB 50016.

3.1.3 A minimum space of 500 meters shall be maintained from any residential block. A cotton enterprise shall separate its living area, production area, and storage area one from another and a safe distance shall be maintained among them.

### **3.2 Fire prevention and safety**

3.2.1 A cotton processing enterprise shall provide a fire fighting water tank and a fire brigade vehicle access road.

3.2.2 A cotton processing enterprise shall have reliable fire fighting power supply, water supply, and fire prevention

and fire fighting tools and devices.

### 3.3 Measuring equipment

Measuring equipment used by a cotton processing enterprise shall be certified in accordance with relevant regulations and shall be used within their calibration validity.

### 3.4 Cotton inspection equipment

#### 3.4.1. Cotton standards

3.4.1.1 National or industrial standards on cotton and short-staple cotton shall be available.

3.4.1.2. Physical reference materials of different grades of cotton shall be available.

#### 3.4.2. .Equipment and instruments

Each enterprise shall be equipped with electric testing instruments, lint ratio ginning device, moisture detector, platform scale, lint ratio balance, balance, raw cotton impurity analyzer, and air flow meter, etc.

#### 3.4.3. Cotton testing laboratory

3.4.3.1 A cotton testing laboratory shall have a trial ginning room, a cotton classifying room, a cotton sample storage room, an instrument testing room, etc.

3.4.3.2 A cotton classifying room shall meet the requirements for artificial day-lighting illumination as specified in standard GB/T 13786—1992 or have a north facing window that provides day- lighting.

3.4.3.3 The cotton sample storage room shall be kept clean, well ventilated, and damp-proof.

3.4.3.4 The effective storage life of cotton samples shall be no less than one year.

## 4. Personnel

### 4.1 General requirements

A cotton processing enterprise shall be staffed with professional cotton quality inspection personnel and cotton processing technical personnel (including cotton quality inspection practitioner qualification certificate holders, cotton inspection qualification certificate holders, and cotton processing qualification certificate holders) qualified jointly by state personnel administrative authority, state employment authority, and relevant authorities.

### 4.2 Managerial personnel and technical personnel

Provision of managerial and technical personnel shall satisfy the stipulations of standard GB/T 18353.

## 5. Purchase and Storage of Seed Cotton

### 5.1 Purchase of seed cotton

#### 5.1.1 Grade of seed cotton

5.1.1.1 After removing foreign fibers and other harmful substances, the category, grade, and quantity of the purchased

seed cotton shall be determined in accordance with national standards and technical specifications.

5.1.1.2 Seed cotton inspection shall be carried out following this practice: inspect lint ratio by trial ginning, determine the grade based on the standard, measure the length based on hand pulling and tape measuring, test the moisture regain using an electric moisture meter, and test the impurity using an impurity analyzer.

5.1.1.3 Purchase and inspection of seed cotton shall be carried out in compliance with the stipulations in standard GB 1103.

## 5.1.2 Moisture regain and impurity of seed cotton

### 5.1.2.1 Hand-picked cotton

5.1.2.1.1 The moisture regain of seed cotton shall not exceed 10%.

5.1.2.1.2 If the moisture regain of purchased cotton exceeds 10%, the cotton shall be dried in open air or oven-dried.

5.1.2.1.3 The impurity of the cotton shall be less than 3.0% for top roller ginned cotton or 2.5% for saw ginned cotton.

### 5.1.2.2 Machine-picked cotton

5.1.2.2.1 The moisture regain of seed cotton shall not exceed 13%.

5.1.2.2.2 If the moisture regain of purchased cotton exceeds 13%, the cotton shall be dried in open air or oven-dried.

5.1.2.2.3 The impurity of seed cotton shall not exceed 13%.

## 5.2 Storage of seed cotton

### 5.2.1 General requirements

5.2.1.1. Seed cotton shall be stored separately according to their category, species, and grade and shall be appropriately identified.

5.2.1.2 Cotton delivery area, processing area, storage area, and the living area shall be separated from one another. Purchased seed cotton shall be stored at a designated location.

### 5.2.2 Provisions of warehouse and goods yard

5.2.2.1 The storage area should preferably be located in the upwind direction of the processing shop or be located on a line vertical to the processing shop and the wind direction.

5.2.2.2 The maximum ground occupancy for each warehouse: 6,000 square meters for single-story warehouse, and one firewall shall be provided for every 1,500 square meters.

5.2.2.3 If the total storage quantity exceeds 5,000 MT for an open-air goods yard, separate storage yards should be set up, with a minimum of 30 meters fire prevention distance among them.

5.2.2.4 Goods at an open-air goods yard must be separated into different stockpiles, each one containing no more than eight cotton stacks. A minimum of four meters of fire prevention distance shall be provided among cotton stacks. This distance among stockpiles shall be no less than 10 meters for fire prevention. Fire fighting access ways shall be provided and maintained free of obstacles and obstructions.

5.2.2.5 Each cotton stack of an open-air goods yard shall not surpass (14X20) square meters in ground occupancy and

eight meters in height.

#### 5.2.3 Seed cotton stack

5.2.3.1 Each stack shall preferably be higher in the middle and lower in the perimeter and the stack base shall be drained properly.

5.2.3.2 Each seed cotton stack shall, depending on weather changes, be monitored closely for its temperature and moisture.

5.2.3.3 When a seed cotton stack becomes hotter than 38°C or when the seed cotton moisture regain exceeds 12%, ventilation, stack demolition, or oven-drying measures shall be taken timely or, alternatively, the cotton shall be processed immediately.

#### 5.2.4 Storage of machine-picked cotton

5.2.4.1 When machine-picked cotton is kept in stacks, the stack height shall be no more than four meters.

5.2.4.2 Machine-picked cotton with a moisture regain exceeding 13% shall be oven dried or be processes immediately.

5.2.4.3 The in-stack temperature shall be measured regularly and if it exceeds 33°C, ventilation, stack demolition, or oven-drying measures shall be taken timely or, alternatively, the cotton shall be processed immediately.

## 6. Processing

### 6.1 Quality requirements

6.1.1 Cotton shall be processed to different grades according to national cotton standards and processed cotton shall be packaged, labeled, and identified accordingly.

6.1.2 The grade of ginned cotton shall not be lower than that of its seed cotton.

6.1.3 Ginning quality shall meet the stipulations in standard GB 1103.

6.1.4 Seed cotton shall be delinted several times, and the residual lint rate of seed cotton after three times of delinting shall be less than 3.5%.

6.1.5 Cotton short-staple processing quality shall comply with the stipulations in standard GB/T 20223.

6.1.6 Cotton seeds to be used as planting seeds shall have less than 5% of broken seeds.

6.1.7 Cotton seeds to be used for oil production shall have less than 8% of broken seeds.

### 6.2 Processing capability

The annual processing capability of ginned cotton shall exceed 5,000 MT.

### 6.3 Equipment requirements

6.3.1 Cotton processing equipment shall satisfy the requirements contained in standard GB/T 18353.

6.3.2 Delinters with 140-tooth or less shall not be used in delinting processing.

### 6.4 Technological process requirements

6.4.1 Cotton processing shall agree with the requirements of standard GB/T 18353.

6.4.2 During baling, each bale of cotton shall be tested on the assembly line for its moisture regain and the data shall be saved in the bar code.

6.4.3 Recycled cotton and short-staple cotton shall be collected separately and be marked and identified.

#### 6.5 Installation requirements

Cotton processing equipment shall be installed as required by standard GH/T 1043-2007.

#### 6.6 Economic indices

6.6.1 Power consumption for processing one MT of saw ginned cotton shall not exceed 114kW.h.

6.6.2 Power consumption for processing one MT of machine-picked cotton shall not exceed 250kW.h.

6.6.3 Power consumption for processing one MT of top roller cotton shall not exceed 185kW.h.

6.6.4 The consumption of steel wire (steel strip, plastic binding tape) and package cloth (plastic package bag) for baling one MT of ginned cotton is given in Table 1.

**Table 1 Steel Wire (Steel Strip, Plastic Binding Tape) and Package cloth (Plastic Package Bag) Consumption for One MT Of Ginned Cotton**

Materials	Steel wire (kg)	Steel strip (kg)	Package cloth (m <sup>2</sup> )	Plastic binding tape (kg)	Plastic package bag (m <sup>2</sup> )
Consumption indices	≤10	≤12	≤22	2.6±0.3	3.1±0.3

#### 6.7 Inspection requirements

6.7.1 Ginned cotton shall be inspected as stipulated in standard GB 1103.

6.7.2 Long staple cotton shall be inspected as stipulated in standard GB 19635—2005.

#### 6.8 Environmental protection requirements

6.8.1 Air-borne dust concentration at the workplace and concentration of dust emitted into air shall meet requirements stipulated in GB/T 18353.

6.8.2 The noise in the workplace shall meet the requirements stipulated in GB/T 18353.

### 7. Package, Labeling, and Storage

7.1 Cotton package and labeling shall comply with GB 6975.

7.2 Cotton inspection certificate shall meet the requirements of standard GB 1103.

7.3 Quality of long staple cotton shall meet the requirements of standard GB 19635—2005.

7.4 Ginned cotton bale stacks shall be bedded with a base and open-air stacks shall be covered tightly on the top. The

stack base must be well ventilated.

7.5 Ginned cotton bale must be placed horizontally when stacked; usually not be placed on its side. During stacking, the upper and the lower layer of bales shall have their joints staggered.

7.6 Each ginned cotton bale stack shall occupy a ground area not exceeding 150 square meters at an open-air goods yard. Each stack shall not exceed eight meters in height. A fire prevention distance of two meters minimum shall be maintained among stacks. Each stockpile shall not contain more than eight stacks and the fire prevention distance among different stockpiles shall not be less than 10 meters. The distance between a stockpile and the enclosure wall shall be five meters at a minimum.

Indoor stacks of ginned cotton shall have a clearance of at least one meter from the roof beams. A passageway shall be provided between stacks. The principal passageways shall be two meters wide minimum and other passageways shall not be less than 1.5 meters in width. The stacks shall be minimum 0.5 meter away from the wall and 0.2 meter away from the column.

**END OF TRANSLATION**